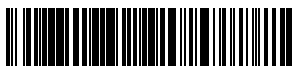


## Lambda DNA– HindIII Digest



1-800-632-7799  
info@neb.com  
www.neb.com



N3012S 171120414041

# N3012S

150 gel lanes (150 µg) Lot: 1711204

500 µg/ml Store at –20°C Exp: 4/14

1.5 ml Gel Loading

Dye, Blue (6X) Store at 25°C

**Description:** The HindIII digest of lambda DNA (*cl857ind1 Sam7*) yields 8 fragments suitable for use as molecular weight standards for agarose gel electrophoresis (1).

Supplied in: 10 mM Tris-HCl (pH 8.0) and 1 mM EDTA.

**Source:** The phage is isolated from the heat-inducible lysogen *E. coli* λ *cl857 S7* and then isolated from the purified phage by phenol

extraction and dialyzed. The double-stranded DNA is digested to completion with HindIII, phenol extracted and dialyzed against 10 mM Tris-HCl (pH 8.0) and 1 mM EDTA.

**Reagents supplied:**  
6X Gel Loading Dye, Blue

**1X Gel Loading Dye, Blue:**  
2.5% Ficoll-400  
11 mM EDTA  
3.3 mM Tris-HCl (pH 8.0@25°C)  
0.017% SDS  
0.015% bromophenol blue

**Usage Recommendation:** The approximate mass of DNA in each of the bands in our Lambda DNA-HindIII Digest is as follows (assuming a 1.0 µg loading):

Fragment	Base Pairs	DNA Mass
1	23,130	477 ng
2	9,416	194 ng
3	6,557	135 ng
4	4,361	90 ng
5	2,322	48 ng
6	2,027	42 ng
7	564	12 ng
8	125	3 ng

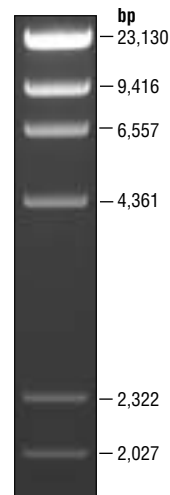
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*Lambda DNA-HindIII Digest visualized by ethidium bromide staining. 1.0% agarose gel.*

**Note:** For long term storage, store at –20°C. If samples need to be diluted, use TE or other buffer of minimal ionic strength. DNA may denature if diluted in dH<sub>2</sub>O and subsequently heated. Temperatures > 60°C may cause denaturation. The cohesive ends of fragments 1 and 4 may be separated by heating to 60°C for 3 minutes.

CERTIFICATE OF ANALYSIS

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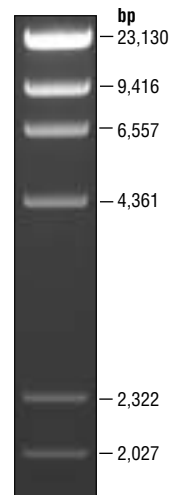
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CERTIFICATE OF ANALYSIS

### **Suggested protocol for loading a sample:**

The following protocol is recommended for a 5 mm wide lane.

1. Prepare loading mixture:

Distilled water	3 µl
6X Blue Loading Dye	1 µl
DNA Ladder	2 µl
Total volume	<u>6 µl</u>

2. Mix gently
3. Load onto the agarose gel

**Note:** The components of the mixture should be scaled up or down, depending on the width of the agarose gel.

### **References:**

1. Daniels, D.L. et al. (1983). In R.W. Hendrix, J.W. Roberts, F.W. Stahl and R. A. Weisberg (Eds.), *Lambda-II* (pp. 519–676). New York: Cold Spring Harbor Laboratory Press.
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